

Amendments to the Specification:

Please replace the paragraph starting on page 1, line 8, with the following amended paragraph:

-- Fuel and waste materials are to be understood as meaning those with or without an ash content, such as brown or hard coals and their cokes, water/coal suspensions, but also oils, tars and slurries, as well as residues or wastes from chemical and wood pulping processes, such as for example black liquor from the Kraft process, as well as solid and liquid fractions from the waste management and recycling industry, such as used oils, PCB-containing oils, plastic and domestic refuse fractions or their processing products, lightweight shredded material from the processing of automotive, cable and electronics scrap, and contaminated aqueous solutions and gases. The invention can be used not only for ~~entrained-bed~~ entrained-flow gasifiers, but also for other gasification systems, such as fixed-bed or fluidized-bed gasifiers or combinations thereof.--

Please replace the paragraph starting on page 1, line 23, with the following amended paragraph:

-- The autothermal ~~entrained-bed~~ entrained-flow gasification of solid, liquid and gaseous fuel materials has been known for many years in the field of gas generation. The ratio of fuel to oxygen-containing gasification agents is selected in such a way that, for reasons of quality of the synthesis gas, higher carbon compounds are cleaved completely to form synthesis-gas components, such as CO and H₂, and the inorganic constituents are discharged in the form of a molten liquid (J. Carl, P. Fritz, NOELL-KONVERSIONSVERFAHREN [NOELL CONVERSION PROCESS], EF-Verlag für Energie- und Umwelttechnik GmbH, Berlin, 1996, p. 33 and p. 73). --

Please replace the paragraph starting on page 2, line 18, with the following amended paragraph:

-- Gasification systems which are provided with a refractory lining have the advantage of low heat losses and therefore offer an energy-efficient conversion of the fuel materials supplied. However, they can only be used for ash-free fuel materials, since the liquid slag which flows off the inner surface of the reaction chamber during the ~~entrained-bed~~ entrained-flow gasification dissolves the refractory lining and therefore only allows very limited operating times to be achieved before an expensive refit is required. --

Please replace the paragraph starting on page 3, line 26, with the following amended paragraph:

-- For example, the reactor wall of the ~~entrained-bed~~ entrained-flow gasifier shown in J. Carl, P. Fritz: NOELL-KONVERSIONSVERFAHREN [NOELL CONVERSION PROCESS], EF-Verlag für Energie- und Umwelttechnik GmbH, Berlin, 1996, p. 33 and p. 73 comprises an unpressurized water shell, the pressure shell, which is protected against corrosion on the inside by a tar/epoxy resin mixture and is lined with lightweight refractory concrete, and the cooling screen, which, in the same way as a diaphragm wall which is conventionally used in the construction of boilers, comprises cooling tubes which are welded together in a gastight manner, through which water flows, which are pinned and which are coated with a thin layer of SiC. Between the cooling screen and the pressure shell, which is lined with refractory concrete, there is a cooling-screen gap which has to be purged with a dry, oxygen-free gas in order to prevent flow-back and condensation. --

Please replace the text inserted at page 5, line 12 in the preliminary amendment with the following text:

-- The various features of novelty which characterize the invention are pointed out with particularity in the claims annexed to and forming part of the disclosure. For a better understanding of the invention, its operating advantages, and specific objects attained by its use, reference should be had to the drawing and descriptive matter in which there are illustrated and described preferred embodiments of the invention.

Brief Description of the Drawings

Figure 1 shows a cross-section through a gasification reactor pursuant to the present invention; and

Figure 2 shows an enlarged segment of the gasification reactor of Figure 1.

Detailed Description of the Preferred Embodiments --

Please replace the paragraph starting on page 7, line 16, with the following amended paragraph:

-- Furthermore, it will be readily understood that the design of the wall which delimits the reaction chamber 1, including parts 3, 4, 5, 6 and 7, which is explained in Example 2, can be used not only for the ~~entrained-bed~~ entrained-flow gasification reactors, which are subject to high thermal loads, but also for other gasification systems, such as for example fixed-bed or fluidized-bed gasifiers or combinations thereof. --